

L 41589-65 EWT(m)/EPF(c)/T Pr-4 WE  
ACCESSION NR: AT5008635

S/2933/64/007/000/0205/0209

AUTHORS: Gryazev, N. N.; Sidorenkov, G. G.

TITLE: Desulfurization of clear petroleum products on aluminosilicate catalyst

SOURCE: AN SSSR. Bashkirskiy filial. Khimiya soraorganicheskikh soyedineniy, soderzhashchikhsya v neft'yakh i nefteproduktakh, v. 7, 1964, 205-209

TOPIC TAGS: sulfur, petroleum, silicate, diesel fuel

ABSTRACT: The results of desulfurizing diesel fuels and catalytic gas oil and their mixtures in the presence of an aluminosilicate catalyst are reported. The catalyst was in standard bead form with an activity index between 36 and 38. The experiment was carried out with five samples of diesel fuels (S-1%), five samples of catalytic gas oil (S-1.1%), and five samples of a mixture of the two. The desulfurization was studied as a function of reaction temperature and volumetric rate. The results show that maximum desulfurization for catalytic gas oil is obtained at 300C for a volumetric rate of 0.5 per hour and at 350C for a volumetric rate of 1.0 per hour. In general, maximum desulfurization for diesel fuels was about 45-50% and 25-30% for catalytic gas oil. The results with the mixtures were

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nonadditive. Best desulfurization was obtained with a mixture ratio 1:1 at temperatures of 375-400C. Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: Saratovskiy politekhnicheskii institut, Omskiy  
neftepererabatyvayushchiy zavod (Saratov Polytechnic Institute, Omsk Petroleum Refinery)

SUBMITTED: 00

ENCL: 00

SUB CODE: FP

NO REF SOV: 007

OTHER: 000

*mil*  
Card 2/2

GIRAZEV, N.N.; SOLYANOVA, I.N.

Adsorption and chemisorption of vapors of oxygen-containing organic substances. Dokl. AN SSSR 161 no.2:380-383 Mr '65.

1. Saratovskiy politekhnicheskii institut. Submitted August 19, 1964. (MIRA 18:4)

KLYAYEV, V.I.; GRYAZEV, N.N.; SLISARENKO, F.A.

Complex study of the structure of some natural disperse systems  
with an "elastic" skeleton. Dokl. AN SSSR 164 no.1:134-136  
S '65. (MIRA 18:9)

1. Saratovskiy gosudarstvennyy pedagogicheskiy institut i  
Saratovskiy politekhnicheskiy institut. Submitted February  
26, 1965.

ACC NR: AR6035222 (A,N) SOURCE CODE: UR/0081/66/000/016/P029/P029

AUTHOR: Gryazev, N. N.; Kuptsova, N. I.; Rakhlevskaya, M. N.; Rumyantseva, G. A.

TITLE: Determination of paraffin hydrocarbons in TS-1 jet fuel

SOURCE: Ref. zh. Khimiya, Part II, Abs. 16P254

REF SOURCE: Sb. Issled. protsessov adsorbts. i katalitich. ochistki nefteproduktov v prisutstvii porist. tel, no. 1, Saratov Saratovsk. un-t, 1965, 3-5

TOPIC TAGS: <sup>fuelrefining, work</sup> paraffin, hydrocarbon paraffin, nonane, refractive index, jet fuel/TS-1 jet fuel

ABSTRACT: Paraffin hydrocarbons were separated from TS-1 fuel with the aid of carbamide; they were then subjected to distillation on a fractionating column with 25 theoretical plates, and the separated narrow fractions were classified according to density and refractive index. The presence of n-nonane and of 2- and 3-methyl nonanes in the TS-1 fuel sample was assumed. The quantitative content of paraffins of normal structure in the TS-1 fuel, which proved to be about

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ACC NR: AR6035222

10%, was established by the carbamide method. A bibliography of 10 titles is included. B. Englin. [Translation of abstract] [NT]

SUB CODE: 21/

Cord 2/2

ACC NR: AR6033757

SOURCE CODE: UR/0081/66/000/018/P012/P013

AUTHOR: Perfilova, V. P.; Gryazev, N. N.; Dmitriyeva, K. A.; Samonina, N. A.;  
Ozerskaya, L. Ye.

TITLE: Removal of sulfur compounds from jet fuels by a sorption

SOURCE: Ref. zh. Khimiya, Part II, Abs. 18P90

REF SOURCE: Sb. Issled. protsessov adsorbts. i katalitich. ochistki nefteproduktov  
v prisutstvii porist. tel. No. 1. Saratov, Saratovsk. un-t, 1965, 35-38

TOPIC TAGS: jet fuel, sulfur compound removal, adsorption, silica gel, organic  
sulfur compound, *FUEL CONTAMINATION*

ABSTRACT: A study has been made of the removal of sulfur compounds from TS-1 jet  
fuels with silica gel. The experiments were conducted on adsorption columns filled  
with 0.25—0.50 mm particles of ASM silica gel activated at about 200C. The fuels  
were fed in the column at a rate of 1 vol fuel/1 vol adsorbent per hour. The thermal  
stability of the fuels was evaluated by oxidation in a LSART-59 apparatus. The group  
composition of sulfur compounds was determined potentiometrically by the method of  
I. A. Rubinshtein and Z. A. Kleymenova (Metody analiza org. soedineniy nefti. ikh  
smesey i proizvodnykh [Analytical methods for determining organosulfur compounds,  
their mixtures, and derivatives in petroleum]. M., Uzd. AN SSSR). This method makes  
it possible to determine mercaptan and bisulfide sulfur with an accuracy of up to

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ACC NR: AR6033757

0.002%. Analysis of the initial fuels and of fuels treated for 6 hr with silica gel showed that TS-1 fuels contain sulfur mainly in the form of sulfides and residual sulfur. The content of bisulfides is very low. At 20C silica gel readily adsorbed mercaptans and residual sulfur. The content of bisulfides remained almost unchanged. ASM silica gel can be used without regeneration for 3 hr. Its adsorption capacity can be fully restored by treatment with steam. The adsorbent loses its activity toward sulfur compounds, in particular, mercaptans, after two regenerations.

SUB CODE: 21/ SUBM DATE: none/

Card 2/2



BOBROV, F.; GRYAZEV, V.

Twin block of flat capacitors. Radio no.12:24, 26 D '60.  
(Electric capacitors) (MIRA 14:1)

POLUSHKIN, K.K.; YEMEL'YANOV, I.Ya.; DELENS, P.A.; ZVONOV, N.V.; ALEKSENKO, Yu.I.; GROZDOV, I.I.; KUZNETSOV, S.P.; SIROTKIN, A.P.; TOKAREV, Yu.I.; LAVROVSKIY, K.P.; BRODSKIY, A.M.; BELOV, A.R.; BORISYUK, Ye.V.; GRYAZEV, V.D.; POPOV, D.N.; KORYAKIN, Yu.I.; FILIPPOV, A.G.; PETROCHUK, K.V.; KHOROSHAVIN, V.D.; SAVINOV, N.P.; MESHCHERYAKOV, M.N.; PUSHKAREV, V.P.; SUROYEGIN, V.A.; GAVRILOV, P.A.; PODLAZOV, L.N.; ROGOZHNIK, I.N.; TETYUKOV, V.D.

"Arbus" atomic power plant with organic heat transfer agent and moderator. Atom. energ. 17 no.6:439 D '64 (MIRA 18:1)

TSOY, L.A.; PUSHKAREVA, Z.V.; GRYAZEV, V.F.

Special characteristics and chemical transformations of carbazole.  
Part 11: Synthesis and structure of phthaloyl derivatives of carbazole. Zhur.ob.khim. 34 no.1:284-290 Ja '64. (MIRA 17:3)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova.

MURSHTEYN, M.K.; PUSHKAREVA, Z.V.; GRYAZEV, V.F.

Absorption spectra of carbazole-containing o-hydroxy azo  
dyes in the ultraviolet and visible regions of spectrum.  
Zhur. ob. khim. 34 no.11:3673-3677 N '64 (MIRA 18:1)

1. Ural'skiy politekhnicheskii institut imeni S.M. Kirova.

TSOY, L.A.; PUSHKAREVA, E.V.; GRYAZEV, V.F.

Some derivatives of 3-amino- and 3-formyl-9-alkyl-6,7-phthaloyl-carbazoles. Zhur.prikl.khim. 37 no.7:1589-1597 J1 '64.  
(MIRA 18:4)

1. Ural'skiy politekhnicheskii institut imeni Kirova.

DETROIT, Mich., Feb. 10 (AP)—The Detroit Police Department today announced that it had arrested a man charged with the murder of a woman in a Detroit hotel.

the derivative of alloxazine and isalloxazine containing the  
( $\beta$ -chloroethyl) amine group. (MIR, org. khim. 1961, 200, 1965.  
(MIRA 18:6)

1. Ural'skiy politekhnicheskii institut imeni S.M.Korova.

KUDRYAVTSEVA, N.A.; PUSHKAREVA, T.V.; ORLOVA, L.A.

Polarographic reduction of sulfoxides and sulfones of the  
phenothiazine series. Zhur. ob. khim. 35 no.1:14-17 Ja '65.  
(MIRA 18:2)

1. Ural'skiy politekhnicheskii institut imeni E.M. Kirova.

L 45929-66 EWT(m)/EWP(j) RM

ACC NR: AR6023263

SOURCE CODE: UR/0058/66/000/003/D030/D030

AUTHOR: Murshteyn, M. K.; Pushkareva, Z. V.; Gryazev, V. P. / 34  
B

TITLE: Spectroscopic investigation of the structure of azo-dyes of the diphenyl, diphenyl amine, and carbazole series

SOURCE: Ref zh. Fizika, Abs. 3D232

REF. SOURCE: Tr. Komis. po spektroskopii. AN SSSR, t. 3, vyp. 1, 1964, 360-368

TOPIC TAGS: organic azo compound, uv spectrum, optic spectrum, ir spectrum, spectrum analysis

ABSTRACT: On the basis of new azo- and diazo components, the authors synthesize more than 40 new glacial azo-dyes, derivatives of carbazole, diphenyl amine, and diphenyl. The ultraviolet and invisible spectra were investigated for them, and new data were obtained on the relation between the structure and chromacity of the obtained compounds. On the basis of the investigated spectra in the visible region, a comparison investigation was made of the structure of the azo-dyes of derivatives of diphenyl amine and diphenyl. As a result of a joint evaluation of the infrared spectra and

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1. 45929-66

ACC NR: AR6023263

polarography data for the obtained compounds, which are ortho-oxy-dyes, it is concluded that they have an azo-structure. [Translation of abstract]

SUB CODE: 07,20

Card 2/2

blg

G. O. FIZIK V. M.

AUTHORS: Klimentov, V. B., Gryazev, V. M.

89-12-4/29

TITLE: Measurement of Neutron Resonance Absorption Integrals (Izmereniye rezonansnykh integralov pogloshcheniya neytronov)

PERIODICAL: Atomnaya Energiya, 1957, Vol. 3, Nr 12, pp. 507-514 (USSR)

ABSTRACT: The measurements were carried out in a swimming-pool reactor. Its critical radius was 55 cm and its height was 60 cm. The active zone contained 10 kg  $U^{235}$  and the relation  $H/U^{235}$  amounted to 330. Natural uranium and ordinary water were used as heterogeneous reflector. In the center of the active zone a thermal flow of neutrons of less than  $10^8$  n/cm<sup>2</sup>.sec was measured. The resonance integrals were measured by the aid of the statistical method of the reactivity modification of the reactor and they provided the following results:

Element	Resonance absorption Integral in barn	Element	Resonance Absorption Integral in barn	Element	Resonance Absorption Integral in barn
B	280±40	Ga	11,7±2,7	Cs	169±23
N	4,8±2,4	Ge	3,5±2,9	Ba	12,6±1,7
F	2,3±0,5	Se	9,6±1,2	Sm	1790±270

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Measurement of Neutron Resonance Absorption Integrals.

89-12-4/29

Cl	12,8 $\pm$ 1,7	Br	118 $\pm$ 14	Gd	67 $\pm$ 8
K	3,5 $\pm$ 1,7	Rb	9,0 $\pm$ 2,8	Hf	1470 $\pm$ 200
Ti	3,8 $\pm$ 0,9	Sr	10,0 $\pm$ 2,6	Ta	474 $\pm$ 62
V	3,3 $\pm$ 0,8	Zr	3,7 $\pm$ 0,5	W	290 $\pm$ 35
Cr	2,6 $\pm$ 1,1	Mo	13,8 $\pm$ 1,7	Os	180 $\pm$ 20
Mn	11,7 $\pm$ 1,5	Ag	466 $\pm$ 70	Ir	2000 $\pm$ 490
Fe	2,3 $\pm$ 0,4	In	2220 $\pm$ 300	Hg	72,4 $\pm$ 8,0
Co	38,3 $\pm$ 4,0	Sn	5,7 $\pm$ 0,7	Th	61,8 $\pm$ 12,0
Ni	3,2 $\pm$ 0,5	Sb	106 $\pm$ 13	U	224 $\pm$ 40
C <sub>u</sub>	3,7 $\pm$ 0,8	Te	106 $\pm$ 13		
Zn	3,4 $\pm$ 0,8	I	106 $\pm$ 12		

There are 2 tables, 6 figures and 9 references, 3 of which are Slavic.

SUBMITTED: May 10, 1957  
 AVAILABLE: Library of Congress  
 Card 2/2

SPINZEV, V. M.,  
FEYNBERG, S. M., VOROBEYEV, E. D., GRYASEV, V. M., KLIMENTOV, V. B., LYASHCHENKO,  
N. Ya., TSIKANOV, V. A.

"Uranium-Water Intermediate Reactor Used for Obtaining High-Intensity  
Neutron Fluxes."

paper to be presented at 2nd UN Intl. Conf. on the peaceful uses of Atomic  
Energy, Geneva, 1 - 13 Sept 1958.

GRYAZEV, V.M.

The BKZ-170-100TSN boiler unit. Biul.tekh.-ekon.inform.  
no.6:39-40 '58.  
(Boilers)

(MIRA 11:8)

167 YAZEV, U.M.

21(4)

PHASE I BOOK EXPLOITATION

SOV/2593

International Conference on the Peaceful Uses of Atomic Energy, 2nd, Geneva, 1958.

Doklady sovetskikh uchenykh: yadernaya reaktory i yadernaya energiya. (Reports of Soviet Scientists: Nuclear Reactors and Nuclear Power.) Moscow: Atomizdat, 1959. 707 p. (Series: Its: Trade, vol. 2) Errata slip inserted. 8,000 copies printed.

General Eds.: M.A. Dollezhal, Corresponding Member, USSR Academy of Sciences, A.K. Krasin, Doctor of Physical and Mathematical Sciences, A.I. Leipunskiy, Member, Ukrainian SSR Academy of Sciences, V.S. Morikov, Corresponding Member, USSR Academy of Sciences, P. Purov, Doctor of Physical and Mathematical Sciences, Ed.: A.P. Alyab'yev; Tech. Ed.: Ye. I. Miel.

PURPOSE: This book is intended for scientists and engineers engaged in reactor designing, as well as for professors and students of higher technical schools where reactor design is taught.

CONTENTS: This is the second volume of a six-volume collection on the peaceful use of atomic energy. The six volumes contain the reports presented by Soviet scientists at the Second International Conference on Peaceful Uses of Atomic Energy, held from September 1 to 13, 1958 in Geneva. Volume 2 consists of three parts. The first is devoted to atomic power plants under construction in the Soviet Union; the second to experimental and research reactors; the third, which is predominantly theoretical, to problems of nuclear reactor engineering. The book is intended for scientists and engineers in the field of nuclear reactor engineering. It is the science editor of this volume. See SOV/2081 for titles of all volumes of the set. References appear at the end of the articles.

PART II. EXPERIMENTAL AND RESEARCH REACTORS

Lazarenko, A.I., V.G. Orlov, M.M. Artyukhin, I.I. Bondarenko, O.D. Kuznetsov, O.I. Lomakin, S.A. Pashov, V.S. Pichukin, L.E. Reine, M.Ye. Stavitskiy, P.I. Uralintsev, L.N. Deryabin, and E.A. Stumbar. Experimental Fast Reactor in the USSR (Report No. 2129)	215
Klimin, I.K., V.A. Dalgatsevskiy, I.S. Gilevskiy, Yu.Ya. Glazkov, V.P. Gromovskiy, and G.M. Poryvskiy. Pilot Plant Reactor with Variable and Adjustable $W_0$ (Report No. 2302)	232
Goncharov, V.V. and et al. Some New and Rebuilt Thermal Research Reactors (Report No. 2185)	243
Prokhorovich, B.V., P.Ye. Gromoslavskiy, V.I. Klimenko, P.Ye. Glazkov, and G.M. Poryvskiy. Dismantling an Experimental Graphite-Uranium Reactor Producing Reactor After Four Years of Operation (Report No. 2297)	319
Pernberg, S.M., Ye. S. Antiferov, V.M. Andreyev, V.B. Kuznetsov, P.Ye. Gromovskiy, and V.A. Tykhanov. An Intermediate Reactor for Obtaining High Intensity Neutron Fluxes (Report No. 2182)	314

PART III. PHYSICS AND ENGINEERING OF REACTOR DESIGN

Leipunskiy, A.I., A.I. Abramov, V.M. Andreyev, A.I. Baryshnikov, G.M. Poryvskiy, V.I. Glazkov, V.I. Golubev, I.D. Gulyko, A.D. Gulyko, O.D. Kuznetsov, M.V. Kuznetsov, N.V. Kuznetsov, R.D. Kuznetsov, V.N. Morozov, M.N. Nikolaev, O.N. Smirnov, P.Ye. Stavitskiy, P.I. Uralintsev, L.N. Usachev, M.I. Petisov, and G.M. Poryvskiy. Research on the Physics of Fast Neutron Reactors (Report No. 2038)	377
Prakhov, V.M. and B.L. Ioffe. Homogeneous Natural Uranium Reactor (Report No. 2296)	388
Pernberg, S.M., Ye. S. Antiferov, V.P. Kuznetsov, V.V. Kuznetsov, V.B. Kuznetsov, V.I. Glazkov, V.I. Golubev, I.D. Gulyko, A.D. Gulyko, O.D. Kuznetsov, M.V. Kuznetsov, N.V. Kuznetsov, R.D. Kuznetsov, V.N. Morozov, M.N. Nikolaev, O.N. Smirnov, P.Ye. Stavitskiy, P.I. Uralintsev, L.N. Usachev, M.I. Petisov, and G.M. Poryvskiy. Self-regulation in a Water-water Power Reactor (Report No. 2145)	411
Glazkov, Yu.Ya. Self-regulation in a Water-water Power Reactor (Report No. 2186)	534
	199

L 24212-55 ENT(m)/EPF(c)/EPF(n)-2/EPR Pr-4/Ps-4/Pu-4 DM

ACCESSION NR: AP5001265

S/0089/64/017/006/0439/0448

AUTHOR: Polushkin, K. K.; Yemel'yanov, I. Ya.; Delens, P. A.; Zvonov, N. V.; Aleksenko, Yu. I.; Grozdov, I. I.; Kuznetsov, S. P.; Sirotkin, A. P.; Tokarev, Yu. I.; Lavrovskiy, K. P.; Brodskiy, A. M.; Belov, A. R.; Borisyyuk, Ye. V.; Gryazev, V. M.; Tetyukov, V. D.; Popov, D. N.; Koryakin, Yu. I.; Filippov, A. G.; Petrochuk, K. V.; Khoroshavin, V. D.; Savinov, N. P.; Meshcheryakov, M. N.; Pushkarev, V. P.; Suroyegin, V. A.; Gavrilov, P. A.; Pndlazov, I. N.; Rogozhkin, I. N.

TITLE: Atomic electric power installation "Arbus" with organic coolant and moderator

SOURCE: Atomnaya energiya, v. 17, no. 6, 1964, 439-448

TOPIC TAGS: small nuclear reactor, organic coolant, organic moderator, reactor economy, nuclear reactor

ABSTRACT: The paper is a summary of the SSSR # 307 report at the Third Inter-

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ACCESSION NR: AP5001265

national Conference on Peaceful Uses of Atomic Energy, 1964. It describes an installation of a reactor in which organic liquid serves as the coolant, and as the moderator. The low-power reactors of about 5 Mw are expected to be economical in the remote regions where the usual energy sources are not available. A regeneration system is described for the coolant which removes the products of radio-lysis. Orig. art. has: 7 figures

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NR REF SOV: 000

OTHER: 000

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5c  
L 24214-65 EWT(m)/EPF(c)/EPF(n)-2/EPR Pr-4/Pa-4/Pu-4 DM  
S/0089/64/017/006/0452/0463 B  
ACCESSION NR: AP5001267

AUTHOR: Feynberg, S. M.; Dollezhal', N. A.; Vorob'yev, Ye. D.; Tsykanov,  
V. A.; Yemel'yanov, I. Ya.; Gryazev, V. M.; Kochenov, A. S.; Bulkin, Yu. M.;  
Ageyenko, V. I.; Aver'yanov, P. G.

TITLE: Physical and exploitation characteristics of the SM-2 reactor 14

SOURCE: Atomnaya energiya, v. 17, no. 6, 1964, 452-463

TOPIC TAGS: research reactor, reactor/SM-2 reactor characteristic, nuclear reactor

ABSTRACT: The paper is a summary of the SSSR # 320 report at the International Conference on Peaceful Uses of Atomic Energy in Geneva, 1964. The reactor SM-2 was designed for a wide range of investigations in nuclear physics, solid state physics, metallurgy, radiation chemistry, physics and technology of nuclear reactor construction, and other fields of science and technology. The reactor was described in Atomnaya Energiya 8, 493 (1960). The thermal neutron flux is  $2.5 \times 10^{15}$  n/cm<sup>2</sup>. sec at 50,000 kw. The fast neutron flux with energy larger

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ACCESSION NR: AP5001267

than 1 Mev in the active zone exceeds  $10^{15}$  n/cm<sup>2</sup>.sec. Orig. art. has: 9 figures

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NR REF SOV: 004

OTHER: 000

Card 2/2

GRYAZEVA, A.S.

New species of the spores of mosses and pteridospermaphytes from  
Cretaceous sediments in Yakutia. Trudy VNIIGT no.239, 108-120 '65.  
(MIRA 18:7)

BURDINA, V.I.; BRUSENTSEV, F.A.; SALTUKOV, A.I.; KOZHUKHINA, S.K.; GRYAZEVA,  
R.P.

Complex of programs for solving the planar problems of crystal  
structure analysis. Zhur. strukt. khim. 5 no.6:936-937 ■-D '64.  
(MIRA 18:4)

1. Vychislitel'nyy tsentr Sibirskogo otdeleniya AN SSSR, Novo-  
sibirsk.

Name: GRYAZEVA, T. P.

Dissertation: Arterial and venous pressure and rate of blood flow in  
rheumatic fever in children

Degree: Cand Med Sci

*Defended at*  
~~Appellation~~: Second Moscow Medical Inst imeni I. V. Stalin

*Duplication*  
Defense Date, Place: 1956, Alma-Ata

Source: Knizhnaya Letopis', No 48, 1956

GRYAZEVA, T.F.

Arterial and venous pressure and the circulation rate in  
rheumatic fever in children. Zdrav.Kazakh. 17 no.12:31-  
36 '57. (MIRA 12:6)

1. Iz Kazakhskogo gosudarstvennogo meditsinskogo instituta.  
(BLOOD PRESSURE) (BLOOD--CIRCULATION) (RHEUMATIC FEVER)

L 07894-67

ACC NR: AP6015959

(A)

SOURCE CODE: UR/0359/65/000/006/0088/0090

15

AUTHOR: Nekhoroshev, A. V.; Gryazin, A. D.

ORG: Povolzhsk Forest Engineering Institute (Povolzhskiy lesotekhnicheskiy institut)

TITLE: Investigation of the physicochemical properties of glian as a material for road slabs

SOURCE: IVUZ. Lesnoy zhurnal, no. 6, 1965, 88-90

TOPIC TAGS: forestry, structural mineral product, road, CLAY

ABSTRACT: Log transport roads are generally built of gravel or crushed brick; concrete slabs which are two to three times more expensive are used only when the other materials are unavailable. Tests are now being conducted on glian, a new material prepared from clay, to replace concrete slabs for road construction. Sample bars of glian (4 x 4 x 16 cm) were formed from a mass with a moisture content of 7, 9 and 10% under pressures of 100 to 500 kg/cm<sup>2</sup> and were heat treated at 600°C and tested for strength under different conditions. Results show that the basic physicochemical properties of glian meet all the required specifications for road concrete. Though glian absorbs more water than concrete, its coefficient of softening (0.8) is comparable to those of other road building materials. Following exposure to 100 freezing-melting cycles, glian displayed no significant reduction of strength. Thus,

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ACC NR: AP6015959

0

the use of glian slabs for construction of log transport roads appears feasible. The estimated cost of glian slabs is 40 to 45% cheaper than concrete slabs. Orig. art. has: 3 tables and 3 figures.

SUB CODE: 13,11,02/ SUBM DATE: 07Dec64/ ORIG REF: 001

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KALININ, P.Ye., inzh.; GRYAZIN, A.D., inzh.

Expansion of the highway system in the Mari A.S.S.R. Avt. dor.  
23 no. 12:4-5 D '60. (MIRA 13:12)  
(Mari A.S.S.R.--Road construction)

GRYAZIN, G.N.

Television unit with a memory tube for making cliches. Izv.  
vys. ucheb. zav.; prib. 6 no.5:139-140 '63.

(MIRA 16:11)

1. Leningradskiy institut tochnoy mekhaniki i optiki.  
Rekomendovana kafedroy radiotekhnicheskikh priborov i  
ustroystv.

MARTIN, A.I.; LONN, G.N.

Effect of the nonlinearity of a sweep on the reading error in oscillographic measurements. Geofiz. prib. no.20:83-87 '64. (MIRA 18:9)

1. Leningradskiy institut tochnoy mekhaniki i optiki.

ACC NR: AP6025713

SOURCE CODE: UR/0187/66/000/005/0046/0050

AUTHOR: Zakharov, I. P. <sup>(deceased)</sup>  
A Gryazin, G. N.

ORG: Leningrad Institute of Fine Mechanics and Optics (Leningradskiy institut  
tochnoy mekhaniki i optiki)

TITLE: Tv observation of rotating objects

SOURCE: Tekhnika kino i televideniya, no. 5, 1966, 46-50

TOPIC TAGS: tv equipment, tv camera, tv photography

ABSTRACT: The article comprises: (1) A review based on 1951-64 Soviet  
published sources and (2) A brief report of some experiments with tv observation  
of rotating objects (detailed below). The test outfit comprised: a vidicon-type  
Soviet-made PTU-22 industrial tv unit, a Soviet-made SU-1 stroboscopic-light  
unit (flash lamp), and a sync-pulse generator. The latter (its block diagram is

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UDC: 621.397.9

ACC NR: AP6025713

shown) ensured periodic or single pulses synchronized with the rotating object and phased with its position in space. Picture definition was measured by a special test pattern — a white disk 500-mm diameter with nine groups of black lines of different thicknesses; the definition measured at 10–1000 rpm (0.21–21 m/sec) showed a reduction by 65%. "A. V. Krasotkin and Ye. B. Sokolov took part in developing and testing the equipment." Orig. art. has: 4 figures and 1 formula.

SUB CODE: 109 / SUBM DATE: none / ORIG REF: 005

Card 2/2

GRYAZIN, N. V.

GRYAZIN, N. V. -- "Bases of the Organization of Forestry in Group II Forests of the Estonian SSR." Latvian Agricultural Academy, 1954. (Dissertation for the Degree of Candidate of Agricultural Sciences)

SO: Izvestiya Ak. Nauk Latvyskov SSR, No. 9, Sept., 1955

SECRET *N.V.*  
Forestry. Forest Management

X-1

Abc Jour: Ref Zhur-Biol., No 10, 1956, 43925

Author : Gryazin, H.

Inst : Estonian Agricultural Academy

Title : Organization of the Management Sections and  
Establishments in the Forest of Group II of  
the Esthonia SSR

Orig Pub: Sb. nauchn. re Est. s.-kh. akad., 1957, 3, 335-365

Abstract: No abstract.

Card 1/1

GRYAZIN, Vladimir Ivanovich

[Tuberculosis in farm animals and ways of controlling it] Tuberkulez  
sel'skokhoziaistvennykh zhivotnykh i mery bor'by s nim. Alma-Ata,  
Kazakhskoe gos. izd-vo, 1954. 54 p. (MLBA 10:2)  
(Tuberculosis in animals)



Gryazin V.I.

USSR/General Problems of Pathology. Allergy

U-2

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65940

Author : Gryazin V.I., Shcherbakov I.V.  
Inst : Institute of Veterinary Medicine of the Kazakh Branch of  
the All-Union ordera Lenin Academy of Agricultural Sciences  
imeni V.I. Lenin

Title : Allergy and Allergens in Peripneumonia in Bovine Animals.

Orig Pub : Tr. In-ta vet. Kazakh. fil. VVASKhNIL, 1957, 8, 132-138

Abstract : No abstract

Card : 1/1

USSR / Microbiology. Microbes Pathogenic to Man and Animals. General Problems.

15

Abs Jour : Ref. Zhur - Biol., No. 21, 1958, No. 95131

Author : ~~Gryazin, V. I.; Shcherbakov, I. V.~~  
Inst : Institute of Veterinary Medicine of the Kazakhstan  
Affiliate of the Vaskhnil.

Title : Peripneumonia Type of Associates of Glycerin-Vaccine.

Orig Pub : Tr. in-ta vet. Kazakhsk. fil. VASKHNIL, 1957, 8,  
139-156

Abstract : No abstract.

Card 1/1

COUNTRY : USSR F  
 CATEGORY :  
 ABG. JOUR. : IZhBiol., No. 3 1959, No. 10153  
 AUTHOR : Gryazin, V. I., Shcherbakov, L. V.  
 INST. : Kazakh Scientific Research Veterinary Institute  
 TITLE : Susceptibility of Laboratory Animals to the Causal  
 Organism of Bovine Peripneumonia  
 ORIG. PUB. : Tr. Kazakhsk. n.-i. vet. in-ta, 1957, 9, 179-189  
 ABSTRACT : Newborn rabbits were most susceptible to artificial  
 infection. However, of 154 newborn rabbits infected  
 with pathological material from cattle artificially  
 infected with epidemic pneumonia 104 (75.9%) died,  
 and specific pathological changes were noted in 70%  
 of the animals which died. The total length of time  
 necessary for the diagnosis was 4-7-10, and in some  
 cases, 11-15 days. In the bodies of cats the pathogen  
 spread in a generalized manner and was preserved up  
 to 30 days. An opinion was expressed on the basis of  
 Card: 1/2

COUNTRY : USSR  
 CATEGORY : Microbiology. Microbes Pathogenic For Man and Animals. Bacteria. Microorganisms of the Pleuro-  
 ABS. JOUR. : BZhBiol., No. 3 1959, No. 10151  
 AUTHOR : Gryazin, V. I., Shcherbakov, I. V.  
 INST. : Kazakh Scientific Research Veterinary Institute  
 TITLE : Culture of Pathogen of Bovine Peripneumonia in Developing Chick Embryos  
 ORIG. PUB. : Tr. Kazakhsk. n.-i. vet. in-ta, 1957, 9, 190-195  
 ABSTRACT : \* pneumonia Type:  
 Cultures of the peripneumonia pathogen on Martin's bouillon in serum were introduced into the allantoic cavity of 7-9-day chick embryos. The experiments were carried out on 3 cultures of the 7th and 36th generations. The death of the embryos occurred on the 2nd to 5th day. At autopsy punctate and diffuse hemorrhages were found on the chorionallantois. Cultures of the allantoic and amniotic fluids on Martin's bouillon in serum produced a growth on the

Card: 1/2

Country : USSR  
 Category= : Diseases of Farm Animals. Diseases Caused by Bacteria and Fungi  
 Abs. Jour. : Ref Zhur-Biol, No 23, 1958, No 105818  
 Author : Gryazin, V. I.; Shcherbakov, I. V.  
 Institut. : Kazakh Scientific Research Veterinary Institute  
 Title : Biological Diagnosis of Infectious Peripneumonia of Cattle on Lambs and Kids  
 Orig. Pub. : Tr. Kazakhsk. n.-i. vet. in-ta, 1957, 9, 196-207  
 Abstract : A series of experiments carried out to find a model for biological diagnosis of infectious peripneumonia (IP) in cattle showed that lambs and sheep, as well as kids and goats, of any age, are suitable for this purpose. It was demonstrated that it is possible to make biological diagnosis of IP in cattle on lambs within 3-14 days, and on kids and goats within 7-14 days. By slaughtering affected animals on the second to fourth day after infection, it is  
 Card: 1/3

R - 7

Country : USSR R  
Category : Diseases of Farm Animals. Diseases Caused by  
Bacteria and Fungi  
Abs. Jour. : Ref Zhur-Biol, No 23, 1958, No 105818  
Author :  
Institut. :  
Title :  
Orig Pub. :  
Abstract : possible to reduce considerably the time re-  
Cont'd quired for diagnosis and to make it more eco-  
nomical as compared with the use of calves for  
the same purpose. As a diagnostic material for  
carrying out a biological test on the above-  
mentioned animals, a specific exudate of the  
thoracic and articular cavities, and that of  
the lymphatic nodes of cattle, suspected of  
having IP, can be used. The positive results  
of the biological test are estimated on the  
Card: 2/3

GRYAZIN, V. I. :Dr. Vet. Sci — (diss) "General inflammation of the lungs (peripneumonic) of cattle in Kazakh SSR (Results of investigations and observations)," Alma-Ata, 1960, 36 pp (Alma-Ata Zooveterinary Institute) (KL, 44-60, 132)

ACC NR: AP6029014

(A)

SOURCE CODE: UR/0413,6/000/014/0019/0019

INVENTOR: Sharnin, G. P.; Moysak, I. Ye.; Gryazin, Ye. Ye.

ORG: None

TITLE: A method for producing trioxynonanenitro-1,3,5-triphenylbenzenes. Class 12, No. 183726

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 19

TOPIC TAGS: aromatic nitro compound, acetate, hydrocarbon

ABSTRACT: This Author's Certificate introduces a method for producing trioxynonanenitro-1,3,5-triphenylbenzenes. Trichlorononanenitro-1,3,5-triphenylbenzenes are interacted with sodium acetate in acetamide at 130-140°C.

SUB CODE: 07/ SUBM DATE: 14Oct64

Card 1/1

UDC; 547.628,3.07



GRYAZINA, A.I.

Penetration of a foreign body into the cecum. Nov.khir.arkh.  
no.2:106 Mr-Ap '58 (MIRA 11:6)

1. Khirurgicheskoye otdeleniye Nikopol'skoy gorodskoy bol'nitsy.  
(CECUM--FOREIGN BODIES)

GRYAZNOV, A., agronom.

On state farms near the taiga. Nauka i pered. op. v sel'khoz. 8  
no.3:21-22 Mr '58. (MIRA 11:3)

(Perm Province--State farms)

GRYAZNOV, Aleksey (selo Kamyshevatoye, Kirovogradskaya oblast')

Visiting Gitalov. IUn.nat. no.10:13-14 0 '60. (MIRA 14:4)  
(Kirovograd Province—Corn (Maize))  
(Agricultural machinery)

GRYAZNOV, Aleksey Ivanovich; BORZAKOVSKIY, I.V., sost. serii; SAZONOV,  
V.V., red.; LEVINA, L.G., tekhn.red.

[Land loves a good master] Zemlia liubit khoroshego kho-  
ziaina. Moskva, Izd-vo M-va sel'.khoz. RSFSR, 1960. 53 p.  
(MIRA 14:5)

(Chuvashia--Agriculture)

GRYAZNOV, A.

We are increasing the capacity of shafts. Mast. ugl. 4 no.1:  
17-18 Ja '55. (MLRA 8:6)

1. Nachal'nik uchastka pod'yema shakhty no.101 kombinata Karagandaugol'.  
(Karaganda--Coal mines and mining)

POZEN, S.I., podpolkovnik med. sluzhby; BARDOV, A.N., podpolkovnik med. sluzhby;  
BENDET, Ya.A, kapitan med. sluzhby; GRYAZNOV, A.A., leytenant med.  
sluzhby

Prevention of minor injuries. Voen. med. zhur. no.3:79 Mr '58.  
(MILITARY MEDICINE) (MIRA 12:7)

GRYAZNOV, A.A.

GRYAZNOV, A.A., Cand Tech Sci --(diss) "Study of processes of the molecular drying of food and other products and methods of the constructive molding of drying devices." Mos, 1958. 17 pp (Min of Higher Education USSR. Mos Tech Inst of Food Industry). 150 copies (KL, 20-58,97)

GRYAZNOV, A.A., inzhener

Principles of the design and construction of industrial sublimation  
drying units. Sbor. st. NIIKHIMASH no.16:3-62 '54. (MIRA 8:6)  
(Drying apparatus)



LYKOV, Aleksey Vasil'yevich; ~~GRYAZNOV~~, Aleksey Andreyevich; KHMEL'NITSKAYA, A.Z., redaktor; GOTLIB, E.M., tekhnicheskii redaktor

[Molecular drying] Molekuliarnaya suшка. Moskva, Pishchepromizdat, 1956. 270 p. (MLRA 9:12)  
(Drying)

SOV/63-3-6-14/13

AUTHOR: Gryaznov, A.A., Candidate of Technical Sciences

TITLE: High-Vacuum Diffusion Pumps (Vysokovakuumnyye diffuzionnyye nasosy)

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1958, Vol III, Nr 6, pp 798-802 (USSR)

ABSTRACT: High-vacuum devices are used for the separation of high-boiling organic substances which are not heat-resistant, like plasticizers, dyes, vitamins, hormones, etc; for the storing of food products; and for the production of rare metals, steel alloys, optical glass, etc. The vacuum needed in the different cases ranges from  $1 \cdot 10^{-8}$  to  $1 \cdot 10^{-2}$  mm mercury column. Modern fractionating vapor-oil diffusion pumps have an output from 100 to 20,000 l/sec with a vacuum of up to  $1 \cdot 10^{-7}$  mm mercury column. The present trend is in the direction of ion pumps [Ref. 4, 5]. The theoretical foundation for the diffusion pump was laid by Gaede and Langmuir in [Ref. 2, 3, 6, 7]. A diagram of such a pump is shown in Figures 1 and 2. The vapor passes with high speed through pipe D. Gas is pumped off through pipe M. Molecules of the pumped-off gas diffuse through f and are carried off by the gas flow. Vapor mole-

Card 1/2

High-Vacuum Diffusion Pumps

307 00-6-1-1-1

cules diffuse in the opposite direction and are condensed on the walls of the condenser K. The Langmuir condensation pump is shown in Figure 3. The vapor in pipe D carries with it molecules from pipe L. Both are condensed by the condenser K. A typical diffusion pump with fractionation is shown in Figure 7. The oil in cylinder  $d_1$  contains only the highest-boiling fractions. The characteristics of several pumps are shown in Figures 8 - 11 and a table. There are 11 diagrams, 1 table, and 24 references, 12 of which are Soviet, 10 English, and 2 German.

Card 2/2

GRYAZNOV, A.A.

Rapid drying of quickly moving wetted steel strips. Inzh.-fiz.  
zhur. no. 6:112-114 Je '58. (MIRA 11:7)

1. Nauchno-issledovatel'skiy institut khimicheskogo mashino-  
stroyeniya, Moskva.

(Rolling(Metalwork))  
(Drying)

GRYAZNOV, A.P.

Report presented at the Conference on Heat and Transfer.  
Minsk, USSR, 3-13 June 61.

BM-2852  
54

253. S.I. Gritsenko, T. L. Perevalov, Diffusion of Charged Particles at the Presence of Recombination
254. I. L. Perevalov, On Heat Transfer in Laminar Flow in the Slot Part of a Tube
255. I. G. Pechenkin, Solution of Some Problems with Phase Conversions by Operational Calculus
256. L. M. Simoni, Numerical Solution of Some Problems of Motion of a Liquid with Variable Viscosity
257. S. L. Belyov, On Operational Transformation of Radiation Fields in Media
258. Yu. A. Samoylovich, Calculation of Emission of Rectangular Bodies According to Technological Conditions
259. I. R. Kolya, Relativity of Cylindrical Radiation Volume
260. V. K. Timofeev, V. M. Kulev, F. A. Saltykov, Theory of Regeneration Heat Exchanger Design
261. E. I. Pashchenko, On Calculation Method of Heat Transfer Through the Wall at Change of the Aggregation State of One of Solid Media
262. A. V. Kiselevich, N. A. Lavolovich, V. I. Kuznetsov, Regularities of Heating of the Steel Slabs by Radiation and Convection
263. G. I. Babitskiy, Regularities and Some Results of Thermal Treatment of Steel Plates of Rectangular and Circular Shapes
264. L. S. Kiselevich, Heat and Mass Transfer, 1. Heat Free and Forced Convection
265. N. V. Lapin, Heat and Mass Transfer at Turbulent Flow of Gas. Part 1. One Gas at Forced Convection
266. A. S. Gerasimov, E. E. Solodovnikov, Influence of Convective Currents of the Surface on Heat Transfer Rate of Rectangular Bodies and Joints
267. A. A. Gerasimov, On the Heat and Mass Transfer Theory at Convective Motion of Liquid
268. V. I. Subbotin, N. M. Dragunov, B. V. Kozlov, Measurement of Temperature Turbulent Flows in a Liquid Flow
269. A. A. Kiselevich, On the Theory of Fusion and Burning of a Body (The Stefan Problem)

GRYAZNOV, A. A.

"Heat and mass transfer with liquid evaporation from a free surface with forced convection."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

Sci Res Inst of Chemical Engineering.

GANES, V.I., Inzh.; GRIAZNOV, A.A., Inzh.; DOLGODNAY, G.M., kand.tekhn.nauk

Manufacture, properties, and applications of oxidized aluminum  
wires. Elektrotehnika 35 no.3:44-46 Mr '64. (MIRA 17:5)

GRYAZNOV, A.G., inzh.; PAISOV, I.V., doktor tekhn.nauk, prof.

Effect of rare earth metals on the increase in hot  
plasticity of 10Kh16N25M6 steel. Vest.mashinostr.  
45 no.11:58-60 N '65.

(MIRA 18:12)



L 26060-56 ENT(m)/ENP(w)/T/ENP(t)/ETI/ENP(k) LIP(c) ID/EN/IG  
 ACC NR: AP6009261 SOURCE CODE: UR/0122/65/000/011/0058/0060

AUTHOR: Gryaznov, A. G., Engineer; Paisov, I. V., Doctor of technical sciences, Professor 58  
56  
B

ORG: none

TITLE: Effect of rare-earth metals (REM) on the increase in the hot plasticity of high-alloy stainless 10Kh16N25M6 steel 17

SOURCE: Vestnik mashinostroyeniya, no. 11, 1965, 58-60

TOPIC TAGS: high alloy steel, plasticity, tensile strength, impact strength, high temperature effect/10Kh16N25M6 steel austenitic steel,

ABSTRACT: The article deals with the effect of REM, added in the form of ferrocium (~0.2% Ce), on the mechanical properties of 10Kh16N25M6 (0.08-0.10% C, 1.40-1.48% Mn, 0.32-0.44% Si, 0.022% P, 0.009-0.010% S, 15.52-15.78% Cr, 24.32-26.37% Ni, 5.85-6.33% Mo, 0.12% Cu, 0.11-0.12% N) high-alloy austenitic stainless steel in cast and rolled state. The specimens were tested for tensile and impact strength in hot state (at temperatures of 400-1200°C). For comparison, a melt of the same steel but without the addition of ferrocium was also investigated; it still contained, however, some residual Ce (0.006%) because the charge included some scrap of steel melted with REM. Findings: At temperatures of 400-700°C the ultimate strength  $\sigma_B$  of the Ce-containing cast alloy somewhat increases while plasticity decreases, whereas  $\sigma_B$  of Ce-containing 27

Card 1/2 UMC: 620.186.4:669.15-194.3

L 36060-66

ACC NR: AP6009261

2

rolled alloy remains unaffected by these temperatures. Above 700°C the variation in  $\sigma_B$  for both cast and rolled specimens follows the same pattern, the  $\sigma_B$  itself being somewhat (14-18%) lower than in Ce-free steel. On the other hand, Ce-containing specimens display a higher impact strength than Ce-free specimens: Ce is a surface-active element and, as such, it counteracts the segregation of hardening phases at the boundaries and contributes to their fine-disperse and uniform segregation in the interior of the austenite grain, which causes an increase in the impact strength of the steel, increase in its high-temperature strength over the 400-800°C range and increase in hot plasticity at higher temperatures; at 1100-1150°C it expedites the process of recrystallization of the steel, displacing it in the direction of lower temperatures. Further, Ce contributes to the formation at the steel's surface of a strong oxide film which protects the metal against further oxidation and counteracts the burnout of Mo. Orig. art. has: 2 figures and 1 table.

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 003

Card 2/2

vmb

L 38740-66 EWT(m)/T/EWP(w)/EWP(t)ETI IJP(c) JD/JG

ACC NR: AP6025087

SOURCE CODE: UR/0122/66/000/007/0069/0071

AUTHOR: Gryaznov, A. G. (Engineer); Paisov, I. V. (Doctor of technical sciences; Professor)

ORG: none

TITLE: Improving the structure and properties of 10Kh16N25M6 steel by the addition of rare-earth metals <sup>41</sup><sub>38 B</sub>

SOURCE: Vestnik mashinostroyeniya, no. 7, 1966, 69-71

TOPIC TAGS: steel, austenitic steel, heat resistant steel, chromium ~~containing~~ steel, cerium, cerium ~~containing~~ steel, steel structure, steel property/  
10Kh16N25M6 steel

ABSTRACT: The effect of cerium on the structure, properties, and on the gas- and nonmetallic-inclusion contents of 10Kh16N25M6 heat-resistant steel has been investigated on a laboratory scale. It was found that alloying with up to 0.03% cerium has an insignificant effect on steel macrostructure; it slightly increases the size of individual columnar crystals and equiaxial grains, and the whole zone of columnar crystals. This, however, does not adversely effect the steel plasticity. Cerium lowers the oxygen and nonmetallic-inclusion content, prevents the formation of a heavy carbide network, and improves the uniformity of carbonitride distribution within the austenite grains. It also increases the steel's ductility, reduces its

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UDC: 621:669.15'24'26'28-194

L 38740-66

ACC NR: AP6025087

3

susceptibility to crack formation on the ingot surface, and improves forgeability. At -40C (to obtain a fully brittle fracture) the notch toughness of steel containing 0.05—0.30% cerium varied from 2.8 to 5.0 mkg/cm<sup>2</sup> in as-cast condition and from 30.0 to 35.0 mkg/cm<sup>2</sup> after annealing at 1200C and quenching. Corresponding figures for steel without cerium were 1.4—4.2 mkg/cm<sup>2</sup> and 21.6—34.0 mkg/cm<sup>2</sup>. Orig. art. has: 4 figures and 1 table. [ND]

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 004/ ATD PRESS: 5048

Card 2/2

JP

СЫЯСН.І, А.І.

Acorns

Sowing acorns in autumn. Les i step' 4, no. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, DECEMBER 1952 ~~1953~~ Uncl.

KUZNETSOV, B. B.; GRYAZNOV, A. I.

Afforestation

Leaders in shelterbelt forestry. Dost. sel'khoz. No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

GRYAZNOV, A.I.; METAL'NIKOV, Yu.N.; MOLCHANOV, S.S.; NOVIKOVA, G.V.;  
PETUKHOV, V.A. PISAREV, V.Ye.; PYSHKIN, B.N.; PANTYUSHKOVA, Ye.V.;  
SEDOV, M.G.; SHORIN, K.N.; YAKIMENKO, M.N.

The 680 Mev. synchrotron of the Physical Institute of the Academy  
of Sciences of the U.S.S.R. Atom. energ. 13 no.3:228-234 S '62.  
(MIRA 15:9)

(Synchrotron)

S/308/62/000/000/002/008  
B163/B180

AUTHORS: Gryaznov, A. I., Novikova, G. V., Shorin, K. N.

TITLE: Power supply system for the electromagnet of the 680 Mev accelerator

SOURCE: Uskoritel' elektronov na 680 Mev; sbornik statey. Ed. by Z. D. Andreyenko. Moscow, Gosatomizdat, 1962. 24-30

TEXT: The power system used for the 180 Mev proton synchrotron was completely modernized for operation with electrons, especially with respect to the weak magnetic field characteristics at the beginning of the acceleration cycle. A suitably adapted demagnetization device was introduced, the voltage across the magnet windings in the first period of the acceleration cycle was stabilized, and a negative field created before the working cycle. This reduced the residual field in the gap from 50 to 2 oe. The working pulse was supplied from a controllable ignitron rectifier fed from a synchronous generator calculated for an average power of 3000 kw. The generator voltage is controlled by a regulator. Mounted on the same shaft are a 1400 kw asynchronous motor,

Card 1/2



Power supply system for the ...

S/908/62/000/000/002/008  
B163/B180

a 4 ton flywheel for smoothing out power fluctuations, and a synchronous generator for supplying the control circuits. The field windings of the synchronous generators are fed from two autonomous generators comounted with another, 135 kw asynchronous motor and a sub-exditer. Four phase shifters regulate the pulses controlling the ignitron rectifier. A block-diagram of the power system, and circuit diagrams of the ignitron rectifier, demagnetizing arrangement, negative magnetic field system, and initial voltage stabilization are given. There are 5 figures.

Card 2/2

SARMAYEV, E.Z.; GRYZANOV, A.I.

Upsurge of a collective farm. Zemledelie 26 no.9:83-85 S '64.  
(MIRA 17:11)

1. Predsedatel' kolkhoza "Gercy" Eatyrevskogo proizvodstvennogo  
upravleniya Chuvashskoy ASSR (for Sarmayev).

41550

45421  
S/058/63/000/001/030/120  
A062/A101

AUTHORS: Yakovlev, B. M., Meshcheryakov, R. P., Gryaznov, A. L.

TITLE: On the distribution of thermal neutrons emerging from a betatron

PERIODICAL: Referativnyy zhurnal, Fizika, no. 1, 1963, 65, abstract 1A564  
(In collection: "Elektron. uskoriteli". Tomsk, Tomskiy un-t, 1961, 178 - 183)

TEXT: The thermal neutron background was investigated in the betatron laboratory of the Tomsk Polytechnic Institute (near the 25-MeV betatron and in the neighboring premises). It is shown that the maximum value of the thermal neutron flux in the main  $\gamma$ -ray beam is equal to  $7 \cdot 10^3$  neutron/cm<sup>2</sup> per 1 roentgen of  $\gamma$ -bremsstrahlung. The magnitude of the neutron flux in the experimental room strongly depends on the design of the protective shields and the collimator, being in the worst case equal to  $2 \cdot 10^3$  neutron/cm<sup>2</sup> per 1 roentgen of bremsstrahlung. It is pointed out that shielding against the bremsstrahlung from accelerators does not yet ensure a complete shielding against the neutrons. The measurements of the thermal neutrons were carried out by different methods (with the

Card 1/2

S/058/63/000/001/030/120  
A062/A101

On the distribution of thermal neutrons...

standard type "Efir-1" radiometer, as well as by measuring the induced activity  
in  $\text{In}^{115}$  and  $\text{Mn}^{56}$ ).

V. Kanunnikov

[Abstracter's note: Complete translation]

Card 2/2

TEKUCHEV, A.N.; FROLIN, M.I.; UDALOV, V.F.; GRYAZNOV, A.L.; BOBROV, B.S.

Automatic device for testing permanent magnets by residual  
induction and coercive force. Izv.tekh. no.4:37-39 Ap '63.  
(MIRA 16:5)

(Magnets--Testing)

BOBROV, B.S. (Ryazan'); GRYAZNOV, A.L. (Ryazan'); GRYAKALOV, V.A. (Ryazan');  
SAL'NIKOV, V.Ya. (Ryazan'); UDALOV, V.F. (Ryazan'); FROLIN, M.I.  
(Ryazan'); SHKHALAKHOV, Yu.Sh. (Ryazan')

System for the automatic control of distributed objects using  
operating lines of automatic telephone exchanges as communication  
channels. Avtom. i telem. 24 no.11:1593-1596 N '63.

(MIRA 16:12)

ACCESSION NR: AP4026853

S/0065/64/000/004/0057/0060

AUTHOR: Gryaznov, A. P.; Rozhkov, I. V.

TITLE: Study of the antiwear properties of jet fuels

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 4, 1964, 57-60

TOPIC TAGS: jet fuel, antiwear jet fuel, T-1 fuel, TS-1 fuel, T-2 fuel, T-5 fuel, PST-1 equipment, Ionol, p-cresol. 2.6-di-tert-butyl-, V-15/A2, KV-1 equipment

ABSTRACT: The antiwear properties of T-2, TS-1, T-1, and T-5 jet fuels have been studied on the special PST-1 laboratory equipment. This equipment simulates the fuel system of turbojet engines and makes it possible to vary the feed temperature of the fuel from 60 to 150C. The antiwear properties of the fuels were determined from the weight loss of an insert replacing the thrust bearing in one of the pistons of standard PN-2TK or PN-3TK fuel pumps. The inserts were made of U-8 or U-8A tool steels (carbon content, 0.8—0.9%; Brinell hardness, 72—96). Comparison of results obtained for inserts with the same hardness showed that T-5 and T-1 fuels have the best antiwear

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ACCESSION NR: AP4026853

properties and T-2 fuel has the poorest. Experiments conducted with fuels at 60—150C showed that the wear of parts in friction increases considerably with an increase in fuel temperature. Addition to TS-1 fuel of 0.02% Ionol (2,6-di-tert-butyl-p-cresol) or of 0.01% V-15/A2 (an organosulfur compound) oil antiwear additives improved the antiwear properties of the fuels: Ionol, in the 60—150C range, and V-15/A2, at up to 100C. The effect of these additives can be attributed to their surface-active properties. At 100C and higher, fuels containing Ionol form deposits on the equipment. The results of the study are in good agreement with previous studies on KV-1 laboratory equipment. Orig. art. has: 5 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 28Apr64

ENCL: 00

SUB CODE: FL

NO REF SOV: 005

OTHER: 001

Card 2/2



L 38587-65 EWT(1)/EWT(m)/EFF(c)/FA/ENG(v)/ENG(m)/T/ENH(g) Pg 5/En-1 WE  
 ACCESSION NR: AP5008101 3/0256/64/000/005/0067/0068  
 35  
 34  
 B

AUTHORS: Zrelov, V. N. (Candidate of technical sciences, Engineer, Lieutenant colonel); Geyaznov, A. P. (Engineer, Lieutenant colonel)

TITLE: Why fuel filters get clogged

SOURCE: Vestnik protivovozdushnoy oborony, no. 5, 1964, 67-68

TOPIC TAGS: aircraft fuel, fuel contamination, fuel filter, fuel tank maintenance, fuel tank

ABSTRACT: Fuels for turbojet engines are cleared by settling and filtration to meet the specifications for their impurities content (maximums of 2.65 mg/liter for particles smaller than 10 microns and 0.53 mg/liter for those of 10-80 microns). These are mineral admixtures, corrosion products, the products of instrument wear. The high-molecular resins, formed during the physicochemical reactions in fuel, were separated by filters, in a dissolved or suspended state. Mechanical and chemical impurities were introduced during fuel storage and transportation; the first were due to corrosion of tanks and pollution by dust, the second originated from the oxidation. Mineral particles adsorbed tarry substances and moisture, increasing in size and in the intensity of filter clogging. The remedies suggested for the

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ACCESSION NR: AP5008101

prevention of an excessive filter clogging are: a meticulous filtration of fuel in storage places; a sufficient time allowed for fuel settling in warehouses; a systematic renewal of fuel in tanks; cleaning of tanks; and the adherence to the prescribed rules of fuel transportation and pumping. Because a subsequent chemical pollution occurs during fuel heating in aircraft engines, it is recommended that fuel stability be increased at high temperatures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: FP, IE

NO REF SOV: 000

OTHER: 000

*W*  
Card 2/2

GRYAZNOV, A. V.

Mekhanizatsiia pogruzochno-razgruzochnykh i skladskikh rabot v stroitel'stve.  
Moskva, Gos. izd-vo stroit. lit-ry, 1950. 302 (2) p. illus.

Bibliography: p. (304)

Mechanization of loading-unloading and warehouse operations in construction  
engineering.

DLC: TH900.G3

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library  
of Congress, 1953.

GRYALNOV, A. V.

Mekhanizatsiia Pogruzochnorazgrusochnykh i Skladskikh Rabot v Stroitelstve (The  
Mechanization of Loading, Unloading and Storage Facilities) ~~1951~~ 302 p.,  
Moscow, 1951.

*GRYAZNOV, A. V.*

USSR/ Engineering - Building aids

Card 1/1 : Pub. 70 - 6/9

Authors : Gryaznov, A. V., Cand. of Techn. Sc.; and Zotov, V. P., Engineer

Title : Method of delivering bricks in large batches

Periodical : Mekh. stroi. 3, 24-26, March 1954

Abstract : Ways of loading, delivering and unloading of structural bricks in large batches are described. The economical gains derived from such delivery methods are listed. Drawings; illustrations.

Institution : .....

Submitted : .....

GRYAZNOV, A.V., kandidat tekhnicheskikh nauk, redaktor; PETROVA, V.V.,  
redaktor izdatel'stva; KOZLOVA, A., tekhnicheskii redaktor;  
KUPTSOVA, N., tekhnicheskii redaktor

[Instructions for transporting bricks, ceramic and slag concrete  
bricks in packets on trays (I 114-56)] Instruktsiia po dostavke  
kirpicha, keramicheskikh i shlakobetonnykh kamnei paketami na  
poddonakh. (I 114-56). Moskva, Gos. izd-vo lit-ry po stroit. i  
arkhitekture, 1956. 75 p. (MLRA 10:3)

1. Russia (1923- U.S.S.R.) Gosudarstvennyi komitet po delam  
stroitel'stva.

(Bricks--Transportation)

✓.  
GRYAZNOV, A., kandidat tekhnicheskikh nauk.

Partial mechanization in unloading cement. Stroitel' 2 no.8:  
22-23 Ag '56. (MIRA 9:12)

(Loading and unloading)

GRYAZNOV, Aleksandr Vasil'yevich, kandidat tekhnicheskikh nauk; PAVZNER, R.L., doktor tekhnicheskikh nauk, professor, nauchnyy redaktor; BEGAK, B.A., redaktor izdatel'stva; PERSON, M.N., tekhnicheskiy redaktor

[Storage and mechanization of loading and unloading work in the construction industry] Sklady i mekhanizatsiya pogruzochno-rasgruzochnykh robot v stroitel'stve. Moskva, Gos. izd-vo lit-ry po stroit.i arkhitekt., 1957. 419 p. (MLBA 10:7)  
(Loading and unloading)



GRYAZNOV, B.

High capacity conveyer for inclined workings. Sov.shakht.  
11.no.2:14 F '62. (MIRA 15:1)  
(Conveying machinery)

12007

S/03/01 026/012/020/036  
B020/01 6

1.9600 also 2800

AUTHORS: Gryaznov, B. A. and Troshchenko, V. T.

TITLE: A Method of Determining the Fatigue Limit

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 12,  
pp. 1398-1401

TEXT: In the present paper, the results obtained by an investigation are given, which was carried out to determine the applicability of the method of increasing stress for determining the fatigue limit of austenite steel 3M 612 (EI612) at normal and high temperature ( $630^{\circ}$ ) as well as of a number of cermets whose fatigue values were widely spread. Steel and cermets on the basis of iron powder with a porosity of 19-22% were subjected to a symmetric cycle of torsions in the device of the type By-8 (VU-8). The increase of stress was warranted by a special device (Fig. 1) through which water was conveyed into a container fastened to the sample. The device consists of a diaphragm pump, an eccentric, a reducer, and electric motor and a starter. Testing the cermets on the basis of chromium carbide and silicon carbide was carried out in the apparatus of the type YM -2 (UM-2) by using the same device as described above. The results obtained  
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A Method of Determining the Fatigue Limit

S/032/60/026/012/020/036  
B020/B056

by investigating the fatigue strength of steel EI612 and of the cermets according to the usual method are given in Fig. 3. Fig. 4 shows the results obtained by investigating the same materials in the case of increasing stress. In tests carried out with symmetric stress cycle, the preliminary stress was 0.8 of the fatigue limit. When recording the curves, the method of least squares was used. The results obtained by using various methods of determining the fatigue limit are given in a table. From this table and from the Figs. 3 and 4 it follows that when using the method of increasing stress, the fatigue limit of steel EI612 may be determined both at normal and also at increased temperature. The saving of time made possible by this method is about 40% for steel EI612 in comparison to the statistical methods. There are 4 figures, 1 table, and 4 references: 1 Soviet, 1 French, and 2 US.

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov Akademii nauk USSR (Institute of Powder Metallurgy and Special Alloys of the Academy of Sciences UkrSSR)

Card 2/2

37835

S/123/62/000/008/007/016

AOO4/A101

15.2450  
AUTHORS: Troshchenko, V. T., Gyzaznov, B. A.

TITLE: Some problems concerning the fatigue strength of cermet materials

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 8, 1962, 23, abstract 8A166 ("Ustalostn. prochnost' mater. i elem. Mater. konfer. v Varshave 12-14 maya 1960" Warszawa, 1961, 15-19)

TEXT: The authors investigated the effects of the test temperature (950 - 1,200°C), mechanical working, stress concentration and the kind of the stressed state on the fatigue strength of cermet materials based on chromium carbide (85% Cr<sub>3</sub>C<sub>2</sub>) and silicon carbide (49.22% SiC) on especially designed and manufactured machines (one with mechanical excitation of forces, the other with an electro-magnetic one). The investigation results revealed that cermet alloys are subjected to fatigue, their test basis is 10<sup>6</sup> cycles,  $\sigma_w$  depends on the test temperature, stress raisers reduce  $\sigma_w$ . The specimen fracture does not show two clearly expressed zones (of porcelain-type form and the zone of brittle failure).

[Abstracter's note: Complete translation]

Card 1/1

X

15.2610

33544

S/123/62/000/002/004/012  
A004/A101

AUTHORS: Troszczenko, W. T., Gрязнов, B. A.

TITLE: Some problems concerning the fatigue strength of ceramic materials

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 2, 1962, 25, abstract 2A54 ("Wytrzymałość zmęczenia tworzyw i elementów metalowych". Warszawa, 1961, 57-60, Polish)

TEXT: The authors present the results of investigations of the effect of temperature, mechanical working, presence of notches and also of the stress sign on the fatigue strength of ceramic materials on the base of chromium carbide (85% Cr<sub>3</sub>C<sub>2</sub>) and silicon carbide (49, 22% SiC). The specimens on the Cr<sub>3</sub>C<sub>2</sub> base had the following composition (in %): Ni - 15.3, C - 9.4, Cr - 71.35. They were manufactured by pressing the powder mixture and subsequent sintering in a hydrogen atmosphere at 1,300 C. Static and fatigue tests were carried out on the rough specimens, ground by the mechanical and electrolytic method. The specimens on the SiC base were made from graphite of the corresponding dimensions and shape and then impregnated with Si in a hydrogen atmosphere. The specimens were heated in the machines by resistance currents. The temperature was measured

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A004/A101

Some problems concerning the fatigue strength ...

with optical pyrometers. The tests on the IM-2 (IM-2) machine were carried out at a loading frequency of 50 cps. The IM-5 (II-5) machine is intended for pure bending tests with simultaneous tension or compression, at a frequency of 400 cps. The stresses in the specimens were determined from the magnitude of the specimen oscillation amplitude, rated with a microscope. During the tests on the IM-2 machine, the cycle asymmetry attained 0.15, this value being 0.8 on the II-5 machine. It was found that a considerable scattering of the fatigue test results could be observed in ceramic materials. The authors recommend to use statistical methods in processing the experimental results. The inflection of the fatigue strength curve in the semilogarithmic coordinates occurs at a base of  $10^6$  cycles. The fatigue strength depends on the temperature and surface state of the specimens. In ceramics on the base of  $Cr_3C_2$ , the fatigue limit is considerably lowered if stress raisers are present. The fatigue strength abruptly decreases if axial tensile stresses act on the specimens, and increases in the presence of axial compressive stresses. During cyclic loading, in most of the cases the fracture has no two clearly expressed zones (fatigue and brittle fracture zones). The mentioned zones could be only observed in fractures of SiC specimens at high temperatures and considerable axial compressive stresses. There are 9 figures.

[Abstracter's note: Complete translation]

G. Mekhed

Card 2/2

PISARENKO, G.S.; TROSHCHENKO, V.T., kand.tekhn.nauk;  
KAPLINSKIY, L.A., inzh.; GRYAZNOV, B.A., inzh.

Study of the fatigue resistance of 1<sup>X</sup>13 steel subject to  
variable bending with static stretching. Energomashinostroenie  
7 no.4:29-31 Ap '61. (MIRA 14:7)

1. Chlen-korrespondent AN USSR (for Pisarenko).  
(Steel—Fatigue)  
(Turbines)

G R Y A Z N O V, B. A.  
I S A K H A N O V, G. V.

5

PHASE I BOOK EXPLOITATION

SOV/6342

Pisarenko, Georgiy Stepanovich, Valeriy Trofimovich Troshchenko, Vsevolod Georgiyevich Timoshenko, Vasiliy Aleksandrovich Kuz'menko, Georgiy Vakhtangovich Isakhanov, Georgiy Nikolayevich Tret'yachenko, Boris Alekseyevich Gryaznov, Nikolay Vasil'yevich Novikov, Vasiliy Nikitich Rudenko, and Rurina Gerasimovna Shumilova

Prochnost' metallokeramicheskikh materialov i splavov pri normal'nykh i vysokikh temperaturakh (Strength of Sintered Materials and Alloys at Room and High Temperatures) Kiyev, Izd-vo Akademii nauk UkrSSR, 1962. 274 p. Errata slip inserted. 2400 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov.

Resp. Ed.: G. S. Pisarenko, Corresponding Member, Academy of Sciences USSR; Ed.: I. V. Lebedev; Tech. Ed.: Yu. B. Dakhno.

Card 1/9

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Strength of Sintered Materials (Cont.)

SOV/6342

**PURPOSE:** The book is intended for engineers, scientific research workers, aspirants, and students concerned with problems of the strength of sintered materials and structural parts.

**COVERAGE:** The book reviews the results of studying the strength, ductility, and elasticity of materials and structural parts produced by powder-metallurgy methods and presents brief information on these methods. Particular attention is given to methods of experimental investigation of physical and mechanical characteristics of heat-resistant sintered materials with specific properties, and to the description of a number of testing units developed for these investigations. Some problems of the theory of the strength of brittle sintered materials and high-porosity ductile materials are discussed. Laws governing changes in characteristics of strength and elasticity under the effect of various factors are outlined. The appendix includes reference tables with data on the basic mechanical characteristics of a number of sintered materials. The assistance of members of the Powder Metallurgy Institute V. I. Kovpak, Yu. A. Kashtalyan, L. V. Kravchuk, A. P. Yakovlev, V. K. Kharchenko, V. K. Kuz'menko, and V. A. Chebotarev is acknowledged. There are 141 references, mostly Soviet.

Card 2/8 2

GRYAZNOV, B.A., inzh.; TROYAN, I.A., inzh.

Unit for fatigue testing of specimens subjected to longitudinal vibrations. Mashinostroenie no.6:89-90 N-D '62.

(MIRA 16:2)

1. Institut metallokeramiki i spetsstlavov AN UkrSSR.  
(Fatigue testing machines)

L 19740-63

EWP(r)/EWP(q)/EWT(m)/BDS

AFFTC/ASD/APGC

EM/JD

ACCESSION NR: AT3002163

S/2919/62/000/000/0177/0181

AUTHOR: Gryaznov, B. A.

TITLE: Fatigue strength of vibrating turbine blades <sup>16</sup> <sub>26</sub> *AB*

SOURCE: Voprosy rasseyaniya energii pri kolebaniyakh uprugikh sistem; trudy nauchno-tekhnicheskogo soveshchaniya. Kiev, Gostekhnizdat USSR, 1962, 177-181

TOPIC TAGS: turbine blade, fatigue strength, vibration

ABSTRACT: Turbine blade fatigue strength was investigated at variable vibration frequencies (generated by an electromagnet in a special testing device). Strain gauges and resin-acetone lacquer coatings were used on the blade surface to record blade strain and fracture traces due to material fatigue. The fatigue endurance limit was found to be at  $24 \text{ kg/mm}^2$ . Fracture location under 240 cps vibration test was found to be different from fracture location at 560 cps. Furthermore, the change in fatigue slope was observed to occur at 10 million cycles. Orig. art. has: 5 figures.

ASSOCIATION: none

Card 1/1

ACCESSION NR: AP4029204

8/0226/64/000/002/0032/0039

AUTHOR: Boyko, P. A.; Gryaznov, B. A.; Dubinin, V. P.; Klimenko, V. N.; Kuz'menko, V. A.; Osasyuk, V. V.; Radomyshel'skiy, I. D.; Rudenko, V. N.

TITLE: Investigation of the properties of N32D4 high-alloy nickel-copper powder-metal steel

SOURCE: Poroshkovaya metallurgiya, no. 2, 1964, 32-39

TOPIC TAGS: N32D4 steel, high alloy steel, nickel copper steel, powder metal steel, copper containing alloy, nickel containing alloy

ABSTRACT: The authors investigate subject properties manufactured by two technological variations. It was shown that the higher pressures of the first pressing and temperature of the first sintering raises the density of the manufactured samples only slightly and has little affect on the strength characteristics in static tests. These results are presented in tables and graphs. In dynamic tests (resiliency, ultimate strength) there is a considerable decrease in the strength of the samples manufactured by the second technological variation which is associated with an increased sensitivity of the dynamic strength characteristics of porosity micro-heterogeneity in composition which is higher in the samples subjected to a first

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